

1. (Currently Amended) A core for providing communications between a transmission media and a processor in a parallel serial architecture, said core comprising:
serial data lanes connecting said processor to said transmission media; and
at least one selector connected to said serial data lanes,
wherein said transmission media and said processor have different operating speeds, and
whereby said selector selectively engages different numbers of said serial data lanes to alter a speed of data passing through said core such that said selector is adapted to perform a speed reduction to accommodate said different operating speeds of said transmission media and said processor.
2. (Original) The core in claim 1, further comprising a data controller for controlling an operation of said selector.
3. (Previously Presented) The core in claim 1, wherein each of said serial data lanes includes a buffer.
4. (Original) The core in claim 3, wherein said buffers comprise elastic first in, first out (FIFO) buffers.
5. (Previously Presented) The core in claim 1, wherein said selector comprises a multiplexer.
6. (Original) The core in claim 1, wherein additional speed adjustment is attained by said selector engaging additional lanes.
7. (Cancelled).
8. (Currently Amended) A parallel-serial communication system comprising:
at least one processor;

BUR920010025US1

2

at least one transmission media connecting said at least one processor, wherein said transmission media and said processor have different operating speeds; and

a core between each processor and said transmission media, said core providing communications between said transmission media and said processor, and said core comprising:

serial data lanes connecting said processor to said transmission media; and
at least one selector connected to said serial data lanes,

whereby said selector selectively engages different numbers of said serial data lanes to alter a speed of data passing through said core such that said selector is adapted to perform a speed reduction to accommodate said different operating speeds of said transmission media and said processor.

9. (Original) The parallel-serial communication system in claim 8, further comprising a data controller for controlling an operation of said selector.

10. (Previously Presented) The parallel-serial communication system in claim 8, wherein each of said serial data lanes includes a buffer.

11. (Original) The parallel-serial communication system in claim 10, wherein said buffers comprise elastic first in, first out (FIFO) buffers.

12. (Previously Presented) The parallel-serial communication system in claim 8, wherein said selector comprises a multiplexer.

13. (Original) The parallel-serial communication system in claim 8, wherein additional speed adjustment is attained by said selector engaging additional lanes.

14. (Cancelled).

BUR920010025US1

3

15. (Currently Amended) A core for providing communications between a transmission media and a processor in a byte stripped parallel serial InfiniBand architecture, said core comprising:

serial data lanes connecting said processor to said transmission media; and
at least one selector connected to said serial data lanes,

wherein said transmission media and said processor have different operating speeds, and

whereby said selector selectively engages different numbers of said serial data lanes to alter a speed of data passing through said core such that said selector is adapted to perform a speed reduction to accommodate said different operating speeds of said transmission media and said processor.

16. (Original) The core in claim 15, further comprising a data controller for controlling an operation of said selector.

17. (Previously Presented) The core in claim 15, wherein each of said serial data lanes includes a buffer.

18. (Original) The core in claim 17, wherein said buffers comprise elastic first in, first out (FIFO) buffers.

19. (Previously Presented) The core in claim 15, wherein said selector comprises a multiplexer.

20. (Original) The core in claim 15, wherein additional speed adjustment is attained by said selector engaging additional lanes.

21. (Cancelled).

BUR920010025US1

4